BOOK REVIEWS

Physics of the Solid State

Edited by S. Balakrishna, M. Krishnamurthy and B. Ramachandra Rao, *Academic Press, London & New York* (1969) Price 160s.

This volume has been brought out to commemorate the 60th Birthday of Professor S. Bhagavantam one of the leading scientists of India who has also successfully adorned various important positions of scientific administration. The contributors to the articles are eminent Solid State Physicists from wide geographical range such as London, Toronto, Moscow, Paris, Sydney and various other centres in U.S.A. and India. The subjects also cover quite a wide field including not only diverse modern aspects of Solid State Physics including Crystallography but also such a subject as "Evolution of Oxygen and Nitrogen of Earth's Atmosphere". The editors are to be highly congratulated on their ambitious attempt in bringing out a volume of such diverse interests as well as collecting articles from such a wide geographical area. Many of the articles are from international authorities in the subjects dealt with. The quality of printing and get up are good. The wide nature of the topics and technical nature of the articles are likely to make the volume less useful to the general readers who are interested in Solid State Physics. Those who are not throughly acquainted with the topics will have to read other review articles before appreciating the contributions included in this volume on that topic However, some of the articles are free from this criticism and throw light on interesting new lines of development in a very lucid manner. This volume will serve the limited purpose of catering uptodate informations only to specialists of particular domain of Solid State Physics, through the respective review articles of the present publication. However, the readers of this volume will certainly get an idea about the very wide field of physics covered by solid state physics.

R. K. S.

Introduction to Quantum Field Theory

Paul Roman, *J. Wiley and Sons, Inc, N. Y.*, 1969, pp. 634, $ 18.00.

Paul Roman is a well known author and his 'Advanced Quantum Theory' and 'Theory of Elementary Particles' enjoy a good deal of popularity. The present volume is meant primarily for students taking a course in the subject and anybody with a good knowledge of quantum theory would be able to go through the book. The writing is remarkable for its clarity and although some recent advances or latest application are left out (as the author himself notes) the book would give the reader a sufficient mastery to pursue the researches in the field. An added attraction is the addition of problems at the end of chapters.

The circle of readers that the author has in mind is the students and perhaps that is why he has not given any reference to research papers. However the reviewer considers this to be an unfortunate omission. Besides, there are rather too many printing mistakes (though most of them are trivial) and the reviewer would cite as examples a few occurring in the first few pages :

P5. line below equation (0-3) $-x_1$, $-x_2$, $-x_3$, should be $-x^1$, $-x^2$, $-x^3$.

P9. Second line below equation (0-30), $x \rightarrow 0$ should be $x \rightarrow \alpha$.

P12. Eq. (0-41), $g^{\alpha\mu}$ should be $\varepsilon^{\alpha\mu}$

A. K. R. C.